

# ET-805

## Demo Class

# Betty's Brain and Mindspark

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# From Last Class

- Learner Module - Item Response Theory
- Pedagogy Module

## Muddy Points

- More emphasis on Learner Module in ITS
  - Noted. We will look at more learner models
- Distinction between Pedagogy and Learner Module
  - Let's come back to this topic after our class today



## Betty's Brain

- Open ended learning environment to teach science topics to class 6 students
- Student learn by teaching a science topics to a virtual agent, Betty, by constructing a causal map.
- Students can ask betty to take quiz to test their knowledge
- Learn by teaching



## Activity - Betty's Brain Demo

Software: <https://wp0.vanderbilt.edu/oele/software/>

- Open Intro Module
- Follow the instructions
- Complete the concept map and ask betty to take quiz



## **Activity - Betty's Brain Demo**

- Climate Change module
- 15 minutes



## Activity - TPS

**Think:** What is the Domain model in Betty's Brain. List your answers (3 minutes)

**Pair** with your neighbor and discuss your answer. Together, list down 2 points on how the domain model is used to create learner model. (3 minutes)

**Share** to the class (5 minutes)



## Activity - Class Response

- Learning content
- Concepts and hyperlinks
- Rule based model

### Learner Model

- Learner's causal map
- Overlay model



## Activity - TPS

**Think:** What is the difference between Pedagogy and Learner Module in Betty's Brain. List your answers (3 minutes)

**Share** to the class (5 minutes)

Class Response:

- Learner model is the map that the student created
- Ped module is assessment and feedback from Mr.Davis





# MindsPark

- Intelligent tutoring system to teach Math to school children
- Student learn by answering questions
- Correct answer will be rewarded with reward points (Sparkies)
- Incorrect answers will provide detailed explanation of the answer
- MindsPark is not to replace teachers, it is to assist teachers (Teaching Assistants)



## Activity - Mindspark

Go to: <https://mindspark.in/>

- User name
- Setup a password

Work with Mindspark as student



# Activity - Mindspark - Teacher Login

Go to: <https://mindspark.in/>

Mindspark as Teacher login  
Descriptive Analytics



## Activity - Feedback

**Feedback** List down your experience and feedback based on your interaction with Mindspark

Write it in a paper

**Discuss**



## **In today's class...**

- Betty's Brain
- Mindspark



## Next class ...

- Assignment 1 Presentation
  - 5 minutes for the explanation of system
  - It can include 1 minute demo, or screen shots. Explain what students do in the system, what feedback they will receive etc.
  - 1 minute for each modules (Learner, Domain and Ped)
  - 1- 2 minutes - report impact of the system. Improved learning gain, where it is implemented



## Next Week - 31st Jan

### Class after Next:

- Learner Model revisited
- Bayesian Knowledge Tracing



## Last Activity - Muddy Points

List down

- two important and
- two least clear  
(muddy) points from  
today's class
- **<https://tinyurl.com/et805mp>**

